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49845 CHWEGMAN, LUNDBERG & WOESSNERÆBAY P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAM	EXAMINER	
			CORRIELUS, JEAN M		
			ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Application No. Applicant(s) 10/562 459 GROSSEELD ET AL Office Action Summary Examiner Art Unit Jean M. Corrielus 2162 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 29 December 2005. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-30 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-30 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

Attachment(s)

1) Solicio of References Cited (PTO-892)

1) Notice of Draftsperson's Patent Drawing Review (PTO-948)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Solicion of Draftsperson's Patent Drawing Review (PTO-948)

5) Notice of Informat Patent Africation

Paper Not (S)Mail Date 12-2298

6) Other:

* See the attached detailed Office action for a list of the certified copies not received.

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DETAILED ACTION

 This office action is in response to the application filed on December 29, 2005, in which claims 1-30 are presented for examination.

Information Disclosure Statement

The information disclosure statement (IDS) filed on September 20, 2004 complies with
the provisions of M.P.E.P. 609. It has been placed in the application file. The information
referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-26 and 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 recites a system to process data transaction. Such a system is not embedded in processor or memory to perform the steps and the modules as claimed. The use of the word system does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the system is a physical part of a device can the system as claimed constitute part of a device or a combination of devices to be a machine within the meaning of 101. The memory is not an element of the claimed system, but instead is, at best, for use with the claimed system. After further review the specification, it is evident that system would suggest to one of ordinary skill that all may be reasonable implement as software routines.

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Therefore, the claims 1-10 are rejected as a system of software per se, for failing to fall within a statutory category of invention

Claim 11 recites a method of processing data transaction. Such method claim is not qualified as a statutory process because the claim does not positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplishes the method steps. Therefore claims 11-26 fail to fall within statutory subject matter eligibility under 35 USC 101.

Claim 30 recites a computer readable medium. Such computer readable medium is defined in the specification, page 32, as carrier wave signals. Such carrier wave signals are not a manufacture within the meaning of 101, on which the program is still unavailable to the processor. Therefore,

claim 30 is rejected for failing to be limited to embodiments which fall within a statutory

category

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
 obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-2, 5-12, 15-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briscoe et al., (hereinafter "Briscoe") US Patent no. 5,920,870 and Rierden et al., (hereinafter "Rierden") US Patent No. 5,978,577.

As to claims 1, 11, and 30, Briscoe discloses the claimed "a computer interface module to receive a data transaction request from at least one requesting computer" (receives request for a

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database operation, see col.7, lines 6-11); "a data store interface module to interface the system to the plurality of databases" (communicates and operates with each of databases to perform the requested operations, see col.7, lines 22-25); and "defining an abstraction layer between computer interface module and the data store interface module" (defines an abstraction layer, see col.14, lines 55-65). However, Briscoe does not explicitly identify at least one database of the plurality of databases to communicate the requested. On the other hand, Rierden discloses analogous system for identifying at least one database of the plurality of databases to communicate the requested (receiving a single request for data and determining the location of the physical tables and the database servers that store the requested data, see col.4, lines 8-11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references, by modifying the system for accessing and processing data from original data sources as disclosed by Briscoe, to incorporate the use of identifying at least one database of the plurality of databases to communicate the requested, in the same conventional manner as disclosed by Rierden, see col.4, lines 8-11. One having ordinary skill in the art at the time the invention was made to use such a modification for the purpose of allowing fast and efficient access to distributed information.

As to claims 2 and 12, Rierden discloses the claimed "wherein the data transaction request is an object orientated request and the plurality of databases are horizontally distributed, the data w access layer defining an object orientated abstraction layer between the computer interface module and the plurality of databases" (col.28, lines 7-16).

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As to claim 5, Rierden discloses the claimed "a data dependent routing module that generates a query to at least one of the plurality of databases that is identified based on content of the data in the data transaction request" (col.4, lines 8-11).

As to claims 6-7 and 9-10, Briscoe substantially discloses the invention as claimed In addition, Briscoe disclose the claimed wherein the data dependent routing module identifies a data type from the data transaction request and maps the data transaction request to an associated physical host based on the at least one rule" (col.10, lines 47-65).

As to claim 8, Rierden discloses the claimed wherein data associated with a user is split across the plurality of databases and the data dependent routing module identifies at least one database with the user from the data transaction request' (col.4, lines 8-11).

As to claims 15-29, Briscoe and Rierden disclose substantially the invention as claimed.

Therefore, claims 15-29 are rejected under the same rationale as applied to claims 1-2 and 6-12 above.

6. Claims 3-4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briscoe in view of Rierden and further in view of Taylor US Patent no. 7,403,946.
As to claims 3-4 and 13-14, Briscoe and Rierden disclose substantially the invention as claimed.
Neither Briscoe nor Rierden discloses the claimed "wherein the data access layer comprises a plurality of logical hosts and a plurality of physical hosts, wherein a logical host is derived from

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the data transaction request and mapped to a physical host that identifies at least one of the plurality of databases"; and "at least one logical table and at least one physical table, a logical table being identified from the data transaction request and mapped to a physical table which identifies a corresponding logical host". On the other hand, Taylor discloses the claimed "wherein the data access layer comprises a plurality of logical hosts and a plurality of physical hosts, wherein a logical host is derived from the data transaction request and mapped to a physical host that identifies at least one of the plurality of databases"; and "at least one logical table and at least one physical table, a logical table being identified from the data transaction request and mapped to a physical table which identifies a corresponding logical host" (see fig.2 and fig.3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined Briscoe and Rierden's system to include a physical table and logical table, in the same conventional manner as disclosed by Taylor for the purpose of maintaining the integrity of the data.

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032.
 The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean M Corrielus/ Primary Examiner, Art Unit 2162

December 12, 2008